THE BULLETIN

Monthly News from ENERGY STAR Buildings℠ and Green Lights®

March 1, 1999

1999 Partner and Ally of the Year Contest Winners

ENERGY STAR Buildings and Green Lights would like to congratulate this year's Partners and Allies of the Year for their outstanding commitments to energy efficiency and the ENERGY STAR Buildings and Green Lights Partnership. The following organizations were recognized for their efforts in implementing quality upgrades to their facilities, communicating their partnership participation to the public and to employees, and showing their overall dedication to energy efficiency.

1999 Partners and Allies of the Year

ENERGY STAR Buildings Partners

Corporate:	Polaroid Corp.
Healthcare:	NY State Office of Mental Health
Retail:	Mervyn's California
Government:	Broward County, FL
Education:	Wake County Public School System

ENERGY STAR Buildings Allies

Large Corporate:	Johnson Controls
Small Corporate:	CEC Consultants

Green Lights Partners

Corporate:	Boeing
Healthcare:	Northern Illinois Medical Center
Retail:	Staples
Government:	State of Ohio/Mercer County, NJ (tie)
Education:	University of Virginia

Green Lights Ally

Large Corporate:	Amtech Lighting Services

See page 2 for organizations that were awarded an honorable mention in this year's contest.

1999 ENERGY STAR Awards Ceremony

Celebrate the energy-efficiency achievements of leading organizations in voluntary pollution prevention programs at the 1999 ENERGY STAR Awards Ceremony. On Wednesday, April 14, 1999, the Award Ceremony will honor participants in the ENERGY STAR Buildings and Green Lights Partnership; and the ENERGY STAR Homes, ENERGY STAR Office Equipment, ENERGY STAR Appliance, and ENERGY STAR Exit Sign Programs.

The event will be held at the Washington Hilton in Washington, D.C. For more information, call your account manager or the toll-free ENERGY STAR Hotline at 1-888-STAR YES (1-888-782-7937).

Upgrading Exit Signs Saves Operating and Maintenance Costs

As a nation, we spend about $1 billion annually to operate exit signs in U.S. buildings. Many of these are conventional exit signs, which are fitted with standard-wattage incandescent bulbs. These older exit signs can cost more than $30 apiece to operate each year, and often require hundreds of dollars more in maintenance costs to replace burnt-out bulbs.

Installing more energy-efficient exit signs can significantly reduce operation and maintenance costs without compromising safety. Before you take advantage of this

Web Site Information

ENERGY STAR Buildings℠ and Green Lights®
www.epa.gov/buildings

ENERGY STAR® Label for Buildings
www.epa.gov/buildinglabel

Ally Services and Products (ASAP) Directory
www.epa.gov/asap

Bulletin Home Page
www.epa.gov/appdstar/news

Partner and Ally of the Year Honorable Mentions

We would like to recognize the following organizations for their strong commitments to the ENERGY STAR Buildings Partnership and to energy efficiency.

ENERGY STAR Buildings
Bone & Joint Hospital
Crown Cork and Seal
Delaware State University
City of San Diego, CA
Shaw's Supermarkets
University of Michigan

ENERGY STAR Buildings Allies
Advance Transformer Co.
Verle A. Williams & Assoc.
Viron Energy Services

Green Lights
3M
Hofstra University
State of Michigan
Quakertown Community Schools
City of Scottsdale, AZ

New Participants

We welcome the following new ENERGY STAR Buildings Allies:

Comprehensive Energy Services, Inc.
Ecological Products, Inc.
EMO Energy Solutions
Global Energy Options Energy Consulting
McFall, Konkel & Kimball Consulting Engineers
Public Service Company—Thermal Energy District
Solar Electric Systems
USIE of America, Inc.

low-cost opportunity to save energy, learn which technologies are best for your facilities and your organization's needs.

Upgrading your exit signs does not necessarily mean purchasing entirely new sign fixtures. A less expensive alternative to buying a new unit is to install a retrofit kit to replace the existing incandescent lamp. Types of kits on the market include compact fluorescent, LED, and low-wattage incandescent. They consist of new lamps, wires that connect to the existing power supply, and the ballast (if needed).

Exit sign retrofits are quick and easy to complete–it usually takes less than 15 minutes to screw the adapters into the existing incandescent sockets. However, not all retrofit kits will fit into the older exit sign housings. Before proceeding with retrofit kits, note which type of housing the existing signs use and verify with the kit manufacturer that the retrofits will fit and operate properly with your existing signs.

New exit signs may employ one of several technologies. The most common are incandescent, compact fluorescent, and light-emitting diode (LED). Less conventional light sources include electroluminescent panel and self-luminous exit signs. An LED is a small transistor-like device that produces light when an electric current is passed through it. LEDs are typically encased in discrete epoxy domes or are surface mount chips attached to a circuit board and covered with a single sheet of plastic or other damage resistant coating. To form an exit sign, LEDs are either enclosed in a six-inch-long tube behind the exit sign face or physically arranged to form the word "EXIT."

Research the advantages and limitations of different technologies before purchasing new exit signs. LEDs, which are becoming a popular replacement to the conventional incandescent fixtures, have the following features:

Advantages
LED exit signs
- are compact
- are efficient
- have a long life
- lack environmentally hazardous materials
- can be easily controlled and adjusted.

Limitations
LED exit signs
- are small in size
- have a relatively low light output
- currently have narrow color bands (which makes them better suited to exit signs and other limited markets).

One of the drawbacks of LEDs is their low luminance (or light output intensity). As the technology continues to improve, this is becoming less of an issue. Luminance levels have improved dramatically since 1993 and currently stand at about 25 lumens per watt. (A standard 40-watt incandescent sign can now be illuminated with about 5 watts of LED lamps). For comparison, a single incandescent or fluorescent light bulb may provide 10,000 to 100,000 candelas per square meter whereas a single LED will emit about 15 candelas.

Although some LEDs can be electrically overdriven to produce more initial lumen output, the LED fixture lasts longest when the operating current is at or below 30 milliamps (mA). Providing more electricity to the LED than specified also will cause its lumen output to decrease more rapidly. To maximize the life and output of LED exit signs, check that the operating current is no greater than that recommended by the manufacturer.

Bulletin Subscription Information

The Bulletin is distributed on the first Monday of the month to more than 6,000 ENERGY STAR Buildings and Green Lights participants and friends.

To add or remove your name from the fax distribution list, please call the toll-free Hotline at: **1-888-STAR YES.**

To receive *The Bulletin* electronically, please send an e-mail to: "listserver@unixmail.rtpnc.epa.gov" and in the message body type:
subscribe energystar your first name your last name

If you have questions, you may e-mail Christie Smith, *Bulletin* Editor, at: smith.christie@epamail.epa.gov or call the toll-free Hotline.

ENERGY STAR-Labeled Exit Signs

EPA offers a voluntary program to encourage manufacturers to produce energy-efficient exit signs and to help consumers identify them. To become a Partner in the ENERGY STAR Exit Sign Program, manufacturers produce exit signs meeting EPA ENERGY STAR guidelines for energy efficiency. Partners can then use the ENERGY STAR label to demonstrate to consumers that their products are energy efficient. Manufacturers, and not EPA, test their own products to ensure that they meet EPA specifications. EPA does not endorse any of these products.

- ENERGY STAR-labeled exit signs use five watts or less of electricity per face, with or without an emergency battery.
- ENERGY STAR-labeled exit signs are tested by the manufacturer for visibility and luminance factors that exceed what is currently required in the National Fire Protection Agency's Life Safety Code.
- ENERGY STAR-labeled exit signs have a five-year manufacturer warranty for defective parts.
- Each year, just one ENERGY STAR-labeled exit sign can save about $15-$20 in electricity and maintenance costs when compared with typical incandescent exit signs.
- By the year 2000, companies could be saving 800 million kilowatts of electricity per year by using ENERGY STAR-compliant exit signs. That's a savings of almost $70 million annually!

For more information on LEDs, see the E-Source Technology Atlas Series 1997, Volume 1: Lighting, Chapter 10.

For more information on ENERGY STAR-labeled exit signs and other products, visit the ENERGY STAR Web site at: www.energystar.gov.

Ask the Energy Expert

Have a Question?

Get your maintenance, financing, communications, and partnership questions answered by e-mailing Christie Smith, *Bulletin* Editor, at smith.christie@epamail.epa.gov. Answers to technical questions and other technical tips are also available on the Ally Services and Products (ASAP) Directory on the Web at: www.epa.gov/asap.

Reporting Made Easy

Green Lights participants can look forward to a new, simplified format for reporting their lighting upgrades. In response to organizations' concerns about the information and calculations needed for reporting their progress in the partnership, EPA reduced the form to a simple postcard featuring six questions.

The new report format uses a statistical model to calculate each organization's energy and cost savings. To keep the data accurate and up-to-date, EPA will follow up with a select group of participants to collect additional information. Participants can also share their experiences with the new reporting process through a survey this spring.

Look for the new Green Lights Implementation Report with your organization's anniversary letter, or order the form by contacting your account manager or calling the ENERGY STAR Hotline at 1-888- STAR YES (1-888-782-7937).